(b) Yes, Sir.

(c) Proposals for further investment in Punjab will be examined on merits keeping in view techno-economic considerations and the need for balanced regional development.

(d) As no Central Public Sector Enterprise has been set up in the State of Punjab since 1984, no further employment opportunities could be created in the State.

Electricity production in the country

43. SHRI PRITHIBI MAJHI : Will the Minister of ENERGY be pleased to state:

(a) how many megawatts of electricity is being produced in the country from renewable and non-conventional sources of energy at present;

(b) whether Government propose to undertake further projects in this regard; and

(c) if so, what are the details thereof?

THE MINISTER OF ENERGY (SHRI VASANT SATHE): (a) to (c) Under Wind Energy Programme a total installed capacity of 8.00 MW has been created which has resulted in the production of over 15 million units of electricity for respective State grids already. A total of 27.35 MW capacity is under implementation. Small solar photovoltaic-based electric units for lighting and community uses have also feeen installed in about 5000 villages.

Efforts have also been made to generate electricity from municipal wastes and a 3.75 MW plant in this regard has already been set up in Delhi on an experimental basis. Another 10 MW power generation plant based on rice straw is under execution in Punjab.

A feasibility report for the installation of a 30 MW solar thermal power plant has been prepared and is awaiting final clearances.

The Department of Non-Conventional Energy Sources has also prepared a 15 years perspective paper which envisages annual energy generation/saving from new and renewable sources of energy to the extent of 250.17 million tonnes of coal replacement by the turn of the century provided adequate resources are made available. This includes generation of 15000 MW of power mainly from biomass, wind, solar, small hydro, municipal wastes as well as generation/saving of energy from improved chulhas, biogas plants and other renewable sources.

In addition under hydro power, which is another renewable source, a total capacity of 17778.51 MW has been created in the country as on 31-3-1989. In the Eighth Plan, it is tentatively envisaged to add hydro capacity of 8230 MW.

Adequate fund for new power projects in Andhra Pradesh

44. SHRI TALARI MANOHAR: Will the Minister of ENERGY be pleased to state:

(a) whether Government of [Andhra Pradesh requested the Central Government to provide adequate funds for new power projects in the State;

(b) if so, what is the total allocation made to the State during the last two years;

(c) whether it is also a fact that Andhra Pradesh is facing acute power shortage these years;

(d) if so, what further steps are being taken by the Central Government to generate additional power in. the State; and

(e) whether additional funds are being provided for this purpose?

THE MINISTER OF STATE IN THE DEPARTMENT OF POWER IN THE MINISTRY OF ENERGY (SHRI KALPNATH RAI): (a) and (b) The provision of funds on the development of various sectors is made by the State Government in its Annual Plans according to the relative priority accorded by it to each sector and availability of resources. The funds provided by the Government of Andhra Pradesh for the development of the power sector during the year 1987-88 and 1988-89 were Rs. 206.14 crores and Rs. 248.80 crores (anticipated) respectively.

(c) The energy shortage during the period April, 1988 to March, 1989, in Andhra Pradesh was 9.7%.

(d) Additional generating capacity of about 1384 MW is tentatively expected to be added in Andhra Pradesh in the State Sector. In addition, Andhra Pradesh would also get its share from the approximately 2800 MW being installed in the Southern Region in the Central Sector during the Eighth Plan. Various measures have been taken to assist the State/project authorities for expediting the implementation of power projects which include extensive monitoring of the projects by the Central Electricity Authority (CEA), expediting supply of equipment and materials, visits to project sites by the engineers of the CEA to identify and resolve the constraints/ problems. For improving the efficiency of existing installed capacity, renovation and modernisation of some of the existing thermal stations has been undertaken under a centrally sponsored scheme. Reduction in transmission and distribution losses, efficient load management and energy conservation are some of the other measures which would improve the availability of power in the State.

(e) The State Government have provided an outlay of Rs. 235 crores in their Annual Plan 1989-90 for the power sector.

Power break down in Andhra Pradesh

45. SHRI TALARI MANOHAR: Will the Minister of ENERGY be pleased to state:

(a) what was the average of demand and supply position of electricity in Andhra Pradesh from January, 1988 till January, 1989;

(b) what has been the position of power break down during the months of 1989 in Andhra Pradesh; and

(c) what are the details of steps taken by the Government to improve the situation?

THE MINISTER OF STATE IN THE DEPARTMENT OF POWER IN THE MINISTRY OF ENERGY (SHRI KALPNATH RAI): (a) The average of actual net energy requirement of Andhra Pradesh during January, 1988 to January, 1989 was 48.3 MU/day against which the availability was 42-8 MU/day.

(b) The required information is given in Statement *(See* below).

(c) Various steps are being taken to increase the availability of power in the State, which include expediting commissioning of new capacity, optimum generation from the existing capacity, reduction of transmission and distribution losses and implementaton of energy conservation and demiand management measures. In addition, the State would also get its share of power from the Central Stations in the Southern Region. To the extent possible, assistance would also continue to be provided to Andhra Pradesh from the unallocated portion of power from the Central Sector Stations in the Southern Region as well as from the neighbouring systems.